# **DIVISION of ECOLOGICAL RESTORATION**

Tim Purinton, Director



An electronic newsletter from the Massachusetts Division of Ecological Restoration

# Ebb&Flow #11

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An electronic newsletter from the Massachusetts Division of Ecological Restoration (DER)

<a href="http://www.mass.gov/der">http://www.mass.gov/der</a>

Greetings, restoration friends and colleagues,

Each time we see the raw material coming together for the newsletter, we are impressed with the amount of on-theground restoration that's taking place across the Commonwealth, and the amazing partnerships that are making it happen. River and wetland restoration projects in Kingston and Marshfield, highlighted in this edition of *Ebb&Flow*, underscore this beautifully. DER has also recently taken on **eleven new Priority Projects** – see the **DER News and Project Updates** section for details.

DER staff are often working behind the scenes to assist with river and wetland protection initiatives on a local, regional and statewide level. On that note, a recent posting made to the Great Outdoors Blog reported that one of DER's longtime staff members, Russ Cohen, was recently recognized for his tireless work to help draft, enact and support (through, e.g., his series of riparian area fact sheets) one of the most important pieces of environmental legislation in Massachusetts, the Rivers Protection Act. At its 2011 Annual Meeting, commemorating the 15-year anniversary of the passage of the Act, the Association of Massachusetts Wetland Scientists presented Russ with a Lifetime Achievement Award, as well as honoring the legislative champion of the Act, former State Senator and Environmental Affairs Secretary, Bob Durand.

Since 1996, we've come a long way to not only protect our rivers but to restore them too, reversing the downward trend of river health. While there's still much to do to improve the quality and the natural hydrology of our rivers and streams, taking a moment to reflect on the significant achievement and success of the Rivers Protection Act in safeguarding the Commonwealth's rivers and riverine lands is worthwhile, and Russ deserves a huge pat on the back for his role in that effort.

Restoration of natural stream flow is an important component in the restoration of our rivers, and the next frontier in the restoration realm. To assist with this endeavor, DER welcomes Michelle Craddock to our RIFLS (http://www.rifls.org) and Stream Flow Restoration Program. Michelle will be replacing Jo Carey and working with Laila Parker on our stream flow monitoring network and flow restoration Priority Projects in the Western Mass. Watersheds, First Herring Brook, Parker River, and the Jones River.

See you on the water (or the ice) --

Sincerely,

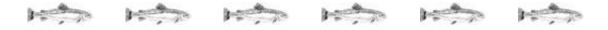


Tim Purinton, Director

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Hunt Durey, Acting Deputy Director

P.S. We wanted to share an interesting tip we recently learned about for enlarging the appearance of type on web pages, e-mail messages and other text on computer screens. Although this trick only works with computer mouse devices equipped with a scroll wheel, if you are fortunate to have one, here's what to do: when trying to read small print on the screen; if you hold down the [Ctrl] key on your keyboard and turn the small wheel in the middle of your mouse, the print size will change, and it will get either larger or smaller depending on which way you turn the wheel. You do not need to highlight anything, nor does it change the formatting of the file-- it only changes the view to become larger or smaller. This trick works great on both the online version and the e-mailed version of **Ebb&Flow**, as well as on many other types of text that appear on your computer screen.



#### **Feature Article:**

#### Green Harbor River in Marshfield coming back to life, with renewed salt-water cleansing

[The following article appeared in the Boston Globe's South Weekly edition on 12/18/11 (click <u>here</u> for the link to the on-line version). We thank reporter <u>Jennette Barnes</u>, for her permission to reprint her article in our newsletter.]



<u>Laurie Bianchi</u> remembers the Green Harbor River in Marshfield as it was in the 1960s. The water was usually clear and enticing on a hot summer day, and she would swim and fish to her heart's content.

That was during the river's last decade of relative health, before more-restrictive tide gates were installed at the place where the river meets the harbor.

The one-way gates allowed water to flow out, but little or no water to flow in, reducing the natural flushing of the river with salt water from the harbor. The result was a habitat increasingly hostile to marine life.

Plants and animals started dying.

After 1970, "it got so dirty that it was like coffee," said Bianchi, who spent childhood summers at the river. Her parents owned a two-acre island - since passed down to her brothers - in the heart of the affected area.

With the water no longer inviting to swimmers, the family stopped making regular trips. The tide gates, it seemed, had put a bleak coda on more than 300 years of human tinkering with the Green Harbor River.

In the last two years, though, and since last summer in particular, the river has been slowly coming back to life.

Thanks to the replacement in 2009 of one of the four "flapper" gates - which closed as the tide tried to come in - with an adjustable gate, more salt water from the harbor is flowing into the river, flushing it out and boosting oxygen and salinity. Fresh-water plants that have choked the river are beginning to recede, and some of the natural marine life is returning.



View of the new tidal gates enabling better tidal flows into and out of the Green Harbor River in Marshfield.

And it's all happening faster than Jay Wennemer, the Marshfield conservation agent, ever expected.

"I think we're all surprised at how quickly we're seeing bigger benefits than we anticipated," he said.

Normally, oxygen in the water on the inland side of the gates at Dyke Road becomes so depleted over the summer, that by August fish start to die. The water gets murky, and algae float on the surface in big mats of green and brown. When the algae die, they settle on the bottom and decompose, further degrading water quality. But last summer, Wennemer saw fewer algae, no fish dying, and clearer water. Most surprisingly, he saw a marked reduction of phragmites, the tall, tassel-topped reeds that thrive in fresh and brackish wetlands. In recent years, phragmites had begun filling the river from the sides.

Bianchi began studying the river in 2003, long before the restoration project began. A science teacher at Whitman-Hanson Regional High School, she has brought students to the river to measure indicators of water quality [click here for more info]. At first, she had her doubts that anything beyond education would come of it.

"I said a prayer in the beginning, because my brother had been trying for years to get people in Marshfield interested," she said.

This time, the stars aligned. Her work built momentum for the project at the state level. Today, Jason Burtner, South Shore regional coordinator for the Office of Coastal Zone Management, serves as project manager.

The tide gate and water monitoring received funding from a variety of state, federal, and private sources. State sources include the Office of Coastal Zone Management, the Massachusetts Bays Program, and the Division of Ecological Restoration. The Corporate Wetlands Restoration Partnership contributed, and the Marshfield Yacht Club was required to donate about \$20,000 as mitigation for dredging the South River.

Employees of the Marshfield Department of Public Works raise and lower the gate, in response to decisions made by an informal committee of interested parties. They opened it a small amount the first year, and then more last summer. The gate can be closed during a storm, as it was for Tropical Storm Irene.

Not only are the reeds dying and the water clearer, Burtner said, but the temperature has dropped. The salinity and dissolved oxygen are higher, and fish are able to swim upstream into the river. Worms and clams are returning, too.

Burtner, Wennemer, and Sara Grady of the Massachusetts Bays Program paddled the river recently to check out its progress. They saw phragmites stunted from salt, and when the sun was right, they could see the bottom.

"This is just a really great success story for what was a relatively small financial investment," Burtner said. The cost was \$149,400, not including the town's contribution, he said. Wennemer pegged Marshfield's contribution at just over \$40,000.

Grady said students from the Cohasset Center for Student Coastal Research were involved in testing the water over the summer, and the tests showed a greater variety of invertebrates present upstream from the dike, compared with the previous year.

The river and harbor are getting closer in terms of the composition of vegetation, fish, and other animals, she said.

According to Wennemer, fishermen have reported catching flounder and striped bass upstream from the dike, something virtually unheard of in the years leading up to the project.

Despite its early success, work to restore the river is far from finished. Officials plan to continue monitoring the height of the water on the inland side of the dike and evaluating how much inflow they can allow without flooding nearby homes.

Neighbors who live near the river expressed some concern before the adjustable gate was installed, Wennemer said, but he has not received any complaints since the gate began operating.

Eventually, the useful life of the remaining flapper gates will expire, he said, and the town and other funders will have to decide what to install in their place, and how much to restrict the tide's natural movement.

While he doesn't know what they'll decide, Wennemer does know what has already been achieved by the new gate. "The increase in water flow up there has tremendously improved the water quality," he said.



# Division of Ecological Restoration News and Project Updates

**DER Selects Priority Projects for 2012** 



View (looking downstream) of the Curtis Pond Dam in Middleton, the removal of which is one of DER's Priority Projects for 2012. Photo courtesy of the <u>Ipswich River Watershed Association</u>.

DER recently <u>selected eleven restoration projects in nine communities</u> as <u>Priority Projects</u> for 2102, for which DER provides technical and/or financial assistance. Here is a brief description of the selected projects:

- Tidmarsh Farm, Inc. Tidmarsh Farm Restoration (Plymouth) -- This project will restore approximately 3.5 miles of stream and 250 acres of wetland to benefit migratory fish such as Eastern brook trout and other resident coldwater species.
- Harwich Conservation Trust Cold Brook Restoration Project (Harwich) -- This project will help restore over 50 acres of degraded freshwater wetlands and over 4,000 feet of altered stream channel impacted by past cranberry farming.
- Save the Bay Rattlesnake Brook Dam Removal (Freetown) -- The removal of this dam, located at the mouth of Rattlesnake Brook on Assonet Bay, will naturalize the stream and open the brook to migratory fish, including trout.
- Town of Plymouth Holmes Dam/Newfield Street Bridge (Plymouth) -- Removal of the Holmes Dam at Newfield Street is the last step of a 12-phase effort to restore natural processes to Town Brook, one of the state's most important migratory fish runs. The Holmes Dam is a high hazard dam and will soon be the final significant barrier to fish passage on Town Brook.
- Ipswich River Watershed Association Ipswich Mills Dam Removal Evaluation (Ipswich) -- The Ipswich Mills Dam is the first dam on the Ipswich River located at the head-of-tide. Modification or removal of the dam would enhance head-of-tide spawning habitat, enhance passage of migratory and resident fish for over 49 miles of river, and improve water quality.
- Town of Danvers Curtis Pond Dam Removal (Middleton) -- The Curtis Pond Dam is a Significant Hazard Dam located on Boston Brook, a tributary to the Ipswich River in Middleton. Over the last three years, the project partners have garnered substantial support to remove this dam to restore conditions for river herring and resident fish species, various birds, and other significant species.
- Jones River Watershed Association Silver Lake and Jones River Sustainable Flow Project (Kingston) -- The Jones River, the largest tributary to Kingston and Plymouth Bays, is an important migratory fish run and provides coldwater habitat. This project would address documented problems in the timing and volume of flows in the Jones River, for the benefit of downstream aquatic health.
- Town of Brewster Freeman's Pond (Brewster) -- The Freeman's Pond project seeks to enhance tidal flow and salt marsh functions by replacing an undersized culvert at the outlet of Paines Creek. The project will benefit over 20 acres of salt marsh and associated plant communities, fish, and coastal bird species.
- Town of Truro Mill Pond (Truro) -- Mill Pond in Truro has been severely degraded by a tidal restriction beneath Mill Pond Road for over 150 years. The project will restore tidal flow to this 13-acre system and will benefit shellfish and finfish species while encouraging a more natural wetland plant community.
- Town of Truro Eagle Neck Creek (Truro) -- Eagle Neck Creek is a 16-acre degraded tidal marsh that flows into Pamet Harbor and Cape Cod Bay. A road and culvert crossing the creek obstruct tidal flushing of the system. The project will remove the tidal restriction to restore salt marsh functions and benefit associated shellfish, finfish, and other coastal wildlife.
- Eight Towns and the Bay Upper Castle Neck Salt Marsh (Ipswich/ Essex) -- The Castle Neck Marsh is located in the upper reaches of the tidal portion of the Castle Neck River. The system has been impacted for many decades by poor drainage resulting from several man-made obstructions within the downstream tidal channel. Over 130 acres of tidal wetlands are impacted by these conditions. The restoration project will improve drainage of the marsh by removing obstructions to create a more natural hydrology and wetland habitat.

Click <u>here</u> to read the full press release announcing these projects. DER anticipates issuing another RFR to solicit a few more Priority Projects in 2012 - contact Nick Wildman at (617) 626-1527 or <u>Nick.Wildman@state.ma.us</u> for more info.

Removal of the Wapping Road Dam an Important Achievement in Restoring Migratory Fish to the Jones River - by Nick Wildman, DER





View (looking upstream) of the Jones River before (left) and after (right) the removal of the Wapping Road Dam and the restoration of free-flowing river and the removal of a barrier to migratory fish movement. Photos courtesy of the Jones River Watershed Association.

One of the last remaining barriers to fish passage on the mainstem of the Jones River was removed in September and October. After many years of effort by the <u>Jones River Watershed Association</u> (JRWA) and its partners, the Wapping Road Dam in Kingston was demolished and the river channel restored in its place. With so much time and work put in over that time, it's amazing to see that the dam structure itself came down relatively easily. You can see some very dramatic time-lapse photography of the process at: <a href="http://jonesriver.blogspot.com/2011/09/un-dam-it.html">http://jonesriver.blogspot.com/2011/09/un-dam-it.html</a>

The Jones River is the largest tributary to Cape Cod Bay. In its 7.5-mile-long course, the River exhibits a number of important coastal ecosystems, but this formerly robust fish run has been subjected to centuries of adverse impacts from dams, flow alterations, sediment inputs, and pollution from runoff. With the replacement of the fish ladder on the Elm Street Dam in 2011, river herring were once again able to access key spawning habitat below Wapping Road, but until this past September, migratory fish seeking spawning grounds were confronted with the concrete wall of the Wapping Road Dam.

Because it provides a stable platform for building and concentrates the flow of the river, the bedrock ledge that crosses the Jones River around Wapping Road (aka MA Route 106) has made for an ideal site for so many activities. There had been a dam in the vicinity of Wapping Road since at least the late 1700's. However, evidence shows that Native Americans likely used the site for fishing and other seasonal activities long before that. The bedrock ledge provided a critical structural component for the Dam and the accompanying mill, which over the years had been used as a sawmill, textile factory, and ironworks at various points. But in the 20<sup>th</sup> century, the dam no longer served a useful purpose, and by the late 1990's became a liability for the owner, Caton Connector Corporation, who uses the building for office space and light industrial work.

Removing the dam was the best alternative to meet the project team's goals. Besides restoring fish passage, the project will reduce the owner's risk and liability for failure of outdated infrastructure, establish a more natural sediment regime through this stretch of the river, and enhance the diversity of the vegetation community on the banks. In addition, with the installation of two state-of-the-art catch basin systems on Wapping Road, the amount of sand, oil, and debris flowing into the Jones will be substantially reduced. The design was developed by the experienced restoration scientists and engineers at Milone and MacBroom, Inc. with input from the JRWA, DER, NOAA Fisheries, and a number of other partners. SumCo Eco-Contracting of Salem provided the construction equipment and expertise to implement the design.

Within hours of the dam breach, a large American eel was seen cruising up through the re-opened reach. The dam had been blocking eels and other fish from reaching key habitats upstream of the dam for over 150 years!

Like all of DER's Priority Restoration Projects, this milestone is the result of a team effort drawing on technical knowledge and funding from the Jones River Watershed Association, NOAA Fisheries, the Town of Kingston, the

<u>MA Division of Marine Fisheries</u>, and the <u>MA Division of Fisheries and Wildlife</u>. DER has been proud to help make this important project a reality. Monitoring of the restored channel, river flows, fish usage, and the riparian vegetation community will continue for at least the next three years.



## Resources and Grants

# Grant, Prize, Fellowship, Contest, Award, Fundraising, etc. Opportunities

(presented in rough chronological order by application/nomination/entry deadline)

By participating in *Fire Up Your Board for Fundraising: Turn Their Passion into Action*, a free Guidestar webinar scheduled for 1:00 PM on Wednesday, February 1, you'll learn how to change your board's mindset about fundraising, overcome their fears, and put everyone to work where you need them. The presenters will show you how to make the fundraising process less intimidating and how to empower your board to be in action making friends. You'll learn new ways to engage your board and get the most out of your board members. Click here to sign up or for more info, and here to learn about and gain access to similarly-themed archived Guidestar webinars. [Click here for info on a related learning opportunity, also offered on Feb.1, entitled *Fundraising Events that Raise Funds: What you need to do to structure a successful event*.]

The intent of the 2012 Wildlife Conservation Youth Engagement Grants, sponsored by Planet Connect, which provide \$500 stipends supporting creative project ideas in a student's local school or community focused on wildlife conservation, is to provide students with a gateway into wildlife conservation careers. After the completion of the project portion of this grant in June, grant winners will participate in a summer wildlife conservation or natural resource internship. Possible locations for internships include local US Fish and Wildlife Service sites, Hands on the Land sites, nature centers, aquariums, zoos and other wildlife conservation facilities. If needed, Planet Connect will provide guidance to help you secure an internship in your local community. At the completion of this 80-hour internship, grant winners will receive an additional \$500.00 stipend. The application deadline is February 1, 2012; click here to apply or for more info.

The Interstate Technology and Regulatory Council (ITRC) is (until Friday, February 10, 2012) seeking proposals for projects to be conducted in 2013 in any of the following areas: Site characterization, sampling, and monitoring; Soil, groundwater, and sediments contamination; Long term stewardship and land use controls; Military munitions; and Watershed Management, where proposals are sought addressing watershed management issues in impaired water bodies. Proposals may consider tools to determine contaminant loadings from various facilities or properties, identify best management practices (BMP) applied in watershed implementation plans, assess low impact development (LID) techniques and applications, and measure results from implementation of BMP or LID techniques. Click here and here for more info, or contact awillett@ecos.org for more info.

The Five Star Restoration Grant Program, administered by the National Fish and Wildlife Foundation (NFWF), provides modest financial assistance on a competitive basis to support community-based wetland, riparian, and coastal habitat restoration projects that build diverse partnerships and foster local natural resource stewardship through education, outreach and training activities. The next **deadline** to apply is **Wednesday**, February 15, 2012 – click here to access the full Request for Proposals document. All Five Star-funded projects must: (1) include on-the-ground wetland, riparian, in stream and/or coastal habitat restoration (in the targeted metropolitan areas, urban restoration projects may also include the creation of backyard wildlife habitat and "green infrastructure" through tree plantings, rain gardens, pollinator gardens, etc.); (2) integrate meaningful environmental education into the restoration project either through community outreach, participation, and/or integration with K-12 environmental curriculum; (3) involve a diverse set of community partners to accomplish the project's objectives; (4) result in measurable ecological and educational/social benefits. Click here for more info.

The mission of the Minnesota-based <u>Unity Avenue Foundation</u> is "to foster ecologically sustainable human behavior within the natural environment". While the Foundation's two highest focus priority areas are **Water** and **Clean Energy**, the Foundation will review requests for other environmental projects as well. Organizations interested in seeking funding from the Foundation should (by **February 15, 2012**) submit one copy of each of the following: a Proposal Summary Cover Sheet (<u>DOC version</u>) (<u>PDF version</u>); a one-page (single-sided) proposal summary (in 12 point font) outlining your proposed project; and a copy of your IRS 501(c)(3) tax determination letter. The Foundation will review the proposal summaries in May and invite full proposals for the selected projects.

Grantstation.com is offering several on-line trainings in the next couple months: <u>How to Develop Capacity</u> <u>Building Grant Requests</u>, on Thurs. February 23; <u>How to Craft a Proposal to a Foundation</u>, on Thurs. March 8; and <u>Writing Federal Grants</u>, on Thurs. March 29. All sessions begin at 2:00 PM Eastern Time and last 90 minutes. The fee for each program is \$89.00 per person or \$150.00 per site. Click <u>here</u> for more info.

Last month, the U.S. EPA announced that it is seeking applicants for a total of \$1 million in Environmental Justice Small Grants expected to be awarded in 2012. The grants enable non-profit organizations to conduct research, provide education, and develop solutions to local health and environmental issues in communities overburdened by harmful pollution. Applicants must be incorporated non-profits working to educate, empower and enable their communities to understand and address local environmental and public health issues. Click <a href="here">here</a> to download the EJ Small Grants RFP and schedule of pre-application teleconference calls. Contact Heather Ross at the EPA's Region One/New England office at (617) 918-1073 or <a href="mailto:ross.heather@epa.gov">ross.heather@epa.gov</a> for more info. The application deadline is February 29, 2012.

The William P. Wharton Trust supports conservation, study and appreciation of nature through projects with tangible and lasting results, those that seek partnerships and that leverage funds to gain matching contributions. The Trust seeks to support projects that directly promote the conservation, study, and appreciation of nature, particularly (in order of priority): Natural areas preservation, primarily in Massachusetts and New England, including funding acquisitions of land for conservation purposes; Management techniques designed to improve environmental quality and species diversity; Bird and forestry research and management, especially at the applied level rather than the theoretical or molecular level; and Creation of materials or projects designed to foster an appreciation of and a concern for wildlife and natural systems. The Trust's next preliminary application deadline is March 1, 2012 at 2:00 PM. For more info, click here or contact the Trust c/o Choate Hall & Stewart, Two International Place, 32nd Floor, Boston, MA 02110, williampwhartontrust@choate.com, or call F. David Lucia, Trust Administrator, at (617) 248-5122.

The <u>National Endowment for the Arts</u> (NEA) recently posted guidelines for its <u>2012 Our Town Grants</u>, which "support creative placemaking projects that contribute toward the livability of communities and help transform them into lively, beautiful, and sustainable places with the arts at their core". Applications are **due March 1** (although earlier submissions are encouraged); click <u>here</u> for more info and <u>here</u> to access a webinar for prospective applicants.

The <u>Skoll Foundation</u>'s mission is to advance systemic change to benefit communities around the world by investing in, connecting and celebrating <u>social entrepreneurs</u>, who see opportunities where others see problems and crises. They apply innovative solutions to social and environmental issues, empowering people and communities to envision and create positive change. The <u>Skoll Awards for Social Entrepreneurship</u> support people whose work has the potential for large-scale influence on critical challenges of our time: tolerance and human rights, health, economic and social equity, peace and security, institutional responsibility, and <u>environmental sustainability</u>. Addressing <u>water scarcity</u> is one of the Foundation's priorities. In addition to core support, the Skoll Foundation supports the participation of Award recipients in the annual <u>Skoll World Forum on Social Entrepreneurship</u>. The next application <u>deadline</u> is <u>March 1, 2012</u>; click <u>here</u> for more info.

Nominations for three national awards in the field of <u>water quality monitoring</u> are being sought (until **March 1, 2012**): the <u>Elizabeth J. Fellows Award</u>; the <u>Barry A. Long Award</u> and <u>Vision Awards</u>. The awards will be presented at the <u>8th National Monitoring Conference – Water: One Resource – Shared Effort – Common Future</u>, taking place in Portland, OR from **April 30 – May 4, 2012** (timed to run back-to-back with <u>River Rally 2012</u>, taking place from **May 4 – 7**).

The Mass. Division of Fisheries and Wildlife (DFW) invites private landowners who want to actively manage their property to benefit wildlife to apply for a Landowner Incentive Program (LIP) grant. This Program is designed to reimburse private landowners up to 75% of the total project cost of managing lands to improve habitat for declining wildlife species across the Commonwealth. Individual private landowners, sportsmen's clubs, land trusts, and other conservation organizations are encouraged to apply to the program. Federal, state, and municipal agencies are not eligible for this funding. The deadline to apply for LIP funding is March 5, 2012; click here for more info (take particular note of the "Quick Links" items). To access the LIP RFP on Comm-Pass, click on "Search for a Solicitation" and then enter FWELP-2013-001 into the "Keywords" box.

The <u>TogetherGreen Conservation Leadership Program</u> invests in promising and proven leaders who are committed to empowering others and to creating positive environmental change in their communities and organizations. Each <u>TogetherGreen Fellow</u> will receive professional development opportunities, a \$10,000 grant to help support an innovative Conservation Action Project, and an opportunity to network with a cadre of committed leaders. In 2012, up to 40 Fellows will be selected to participate in this 12-month-long program. All Fellows will be required to conduct a <u>Conservation Action Project</u> to achieve measurable outcomes in one or more of the following TogetherGreen conservation goals: protect habitat and species in targeted landscapes; protect water resources by improving water quality and water supply for all living things; or reduce the threat of greenhouse gas emissions by reducing energy use and/or improving energy efficiency. To achieve these goals, Conservation Action Projects should also engage new and diverse audiences in conservation action. The deadline to apply to be a 2012 TogetherGreen Fellow is March 5, 2012; click here to download the RFP.

The D.C.-based Max and Victoria Dreyfus Foundation "awards grants to organizations for whom a small amount of money can make a big difference", and includes "environmental and wildlife protection activities and community-based organizations and their programs" on its list of eligible applicants. Organizations seeking support from the Foundation may submit a letter of request, not exceeding three pages in length, which includes a brief description of the purpose of the organization, and a brief outline of the program or project for which funding is sought. The request should also include a 200-word synopsis of the proposal, the budget for the program or project, and the total operating budget for the organization and proof of IRS 501(c)(3) status (click here for more details). Grants are awarded by the Foundation in March, June, and October of each year; requests must be submitted by March 10, 2012 in order to be eligible to receive a grant in June 2012.

The Massachusetts Office of Coastal Zone Management (CZM) anticipates the release of a Request for Responses (RFR) in February 2012 seeking applications for funding under the Coastal and Estuarine Land Conservation Program (CELCP). CELCP provides state and local governments with matching funds to purchase significant coastal and estuarine lands (or conservation easements on such lands) that are considered important for their ecological, conservation, recreational, historic, or aesthetic values. Applications will be reviewed and ranked for possible nomination to NOAA for evaluation and potential Federal Fiscal Year 2013 CELCP funding. CZM anticipates that responses will be due in late March and nomination packages due to NOAA early in April. CZM encourages municipalities and other prospective applicants to begin planning and developing potential land conservation projects. CZM staff is available to provide guidance prior to the RFR release. To discuss potential project ideas with CZM, contact David Janik at david.janik@state.ma.us or (508) 291-3625 ext.12.

The <u>Siemens Foundation</u> and <u>Discovery Education</u> are currently (until March 15, 2012) seeking applications for their <u>We Can Change the World Challenge</u>, where students team up with classmates under teacher/mentors to solve environmental problems in their school, community, and world. The Challenge is divided into three classes:

<u>elementary school</u>, <u>middle school</u> and <u>high school</u>. A total of \$250,000 worth of prizes is expected to be awarded; click here for more info.

Started in 2003 by Dianne Shumaker and the late Paul Shumaker, one of the founding engineers at the GPS firm Garmin, Ltd, the **Shumaker Family Foundation** makes grants to promote Spirituality, Social Justice, Environmental Justice, and Education. Environmental grants go "to organizations that seek to enrich our natural environment, lessen global warming, improve animal welfare, and/or educate human beings to work toward these purposes". The next **deadline** is **March 15, 2012**; click <u>here</u> to apply or for more info.

The Mass. Executive Office of Energy and Environmental Affairs (EEA) is accepting nominations (until Thursday, March 29, 2012) for its annual Secretary's Awards for Excellence in Energy and Environmental Education. EEA Secretary Richard K. Sullivan Jr. will present the awards at a ceremony at the Massachusetts State House this spring to Massachusetts teachers and students involved in school-based programs that promote environment and energy education. All public and private Massachusetts schools (K-12) that offer energy and environmental education programs are eligible to apply for the Secretary's Award. Click here to apply online or contact Meg Colclough at (617) 626-1110 or meg.colclough@state.ma.us for more info.

Recently announced by EEA Secretary Richard K. Sullivan, Jr., the goal of the <u>Get Outdoors Massachusetts</u> <u>Mobile App Contest</u> is to provide software developers with data to create a mobile application for the public to use a smart phone to map to access the Commonwealth's public lands, farm tours, public water and land access points, and other outdoor venues for outdoor recreation. The competition is open to anyone interested in developing technologies that feature Massachusetts' outdoor and natural resources. A suite of prizes will be distributed amongst the contest winners. Contest entries will be accepted until March 30, 2012, and the winners will be announced on April 18. Click here and here for more info.

The **Friendship Fund** (no web page), a private foundation making grants on behalf of several families, provides funding to a variety of environmental and other causes in New England and elsewhere. While there is no set application form, the request should contain a concise statement of the purpose for which the grant is sought. If the grant sought is for a specific program, the staff and budget of the program must be described. In addition, all applications should include the organization's current year's operating budget, list of board members, and the most recent audited financial statement. The annual **deadline** for applications is **April 1**, for consideration at the Foundation's Annual Meeting, held the first week of August. Requests for funding should be submitted to: Friendship Fund, c/o John Hannefant, One Boston Place, Boston, MA 02108 Telephone: (617) 722-7988.

The Mary Norris Preyer Fund (no web page) gives to a variety of conservation and other charitable causes. While this giving is primarily centered in North Carolina, the Foundation accepts requests from throughout the U.S. Requests for funding should be submitted in writing **before April 1** (accompanied by the organization's IRS tax-exempt status letter) to: Jane Preyer, Grant Manager, c/o Piedmont Financial Trust Company, P.O. Box 20124, Greensboro, NC 27420. Telephone: (336) 274-5471.

The <u>Frances R. Dewing (FRD) Foundation</u> is a small, non-profit, charitable organization that **supports** innovative ways of teaching young (K-6) children. Approximately 20 to 30 grants are made per year, mainly for projects in New England, that often have an environmental component. Click <u>here</u> to read the grant guidelines; the next application deadline is April 1, 2012.

Administered by the <u>Water Environment Federation</u> (WEF), the <u>Stockholm Junior Water Prize</u> is the world's most prestigious youth award for a <u>water-related high school science project</u>. While projects may focus on local, regional, national, or global issues, it is essential that they incorporate a research-oriented approach, which means they must use scientifically accepted methodologies for experimentation, monitoring, and reporting, including statistical analysis. Entries are judged on six different criteria: relevance, creativity, methodology, subject knowledge, practical skills, and report and presentation. Unlike other science competitions, this competition weighs the quality of the scientific research paper much more heavily than the poster presentation. The national award will be

presented at <u>an event in Boston in June of 2012</u> and be eligible for the <u>international Water Prize competition in Stockholm, Sweden</u>. The **deadline** to enter the competition is **April 15, 2012**; click <u>here</u> to enter or contact <u>Elena Proakis Ellis</u> for more info.

The <u>TD Charitable Foundation</u> provides financial support to environmental and other programs and projects that add value to the scope of services offered by an organization and that improve the lives of community members within the <u>company's geographic footprint</u> (which includes Massachusetts and most Northeastern states). The benefits of the program should be detailed, quantifiable and included as part of the grant application process. Click <u>here</u> to read the grant guidelines and limitations, <u>here</u> to read the Grant FAQ page, and <u>here</u> to start the online application process, which begins with an eligibility quiz. Applications from Massachusetts are **due** the fourth Friday of January, **April**, July or October; you can <u>e-mail your local community contact</u> if you have further questions.

The <u>Building #19 Foundation</u> was established in 1989 to celebrate the 25th anniversary of Building #19, and to give back to the communities that have made the company's success possible. Its target beneficiaries are smaller charities, usually operated by volunteers, within the towns or in the vicinity of <u>Building #19's 14 locations</u>. Groups seeking funds must do so in writing on your organization's letterhead, explaining what your organization does and what your specific request is, accompanied by evidence of your 501(c)(3) status. Grant requests are usually responded to within thirty days. Mail your request to: Building #19 Inc. 319 Lincoln St., Hingham MA 02043, Attention: Judi Greenberg. Call (781) 749-6900 or write <u>Foundation@Building19.com</u> if you have questions.

The <u>Cigna Foundation</u> is an independent, charitable entity established to help enhance the health, well-being and sense of security enjoyed by people everywhere. It provides direct grants to nonprofit organizations working to create healthier individuals, families and communities. Cigna Foundation programs also support the volunteerism of <u>Cigna's people</u> (the company has eight facilities in Massachusetts). Cigna's collaboration with <u>Water for People</u> combines education, awareness and philanthropy to provide an essential resource to those in need. Requests for funding are reviewed on an ongoing basis until all allocated funds have been committed. Click <u>here</u> to read the Foundation's guidelines and access the FAQ page and application process, or write to <u>FoundationGrants@cigna.com</u> if you have additional questions.

The **ALCES Foundation** (no web page) helps people find pathways to a better life through education, access to healthcare, and fostering greater respect for the people and environment that surround us. Requests for funding should be submitted to: Ferdinand Colloredo-Mansfeld, c/o Cabot Properties, Inc. One Beacon St., Boston, MA 02108. Telephone: (617) 523-1635. While there are no particular application forms or deadlines, groups requesting finding must have tax-exempt status and the funds requested must be used for charitable purposes.

The **David Greenewalt Charitable Trust** (no web page) makes grants for conservation, historic preservation and other purposes in Massachusetts and elsewhere. Applications should be submitted in writing, such as by using the <u>AGM Common Proposal Form</u>, and include info on the nature of the charitable service, along with the organization's IRS tax exemption letter, two years' worth of audited financial statements, and a budget for the proposed project for which funds are sought. Three copies of the application and all attachments/enclosures should be sent to: Winifred I. Li, Trustee, c/o Ropes and Gray LLP, 800 Boylston St., Boston, MA 02199-3600. Telephone (617) 951-7938. The submission deadlines (subject to change each year) are **May 30** and September 30.

The Carlee Charitable Trust (no web page) makes grants to "various public charities which emphasize the protection and care of domestic animals, the protection of natural wildlife species, the conservation of areas of natural habitat and beauty and the preservation of historic architecture in the New England area". Inquiries from groups interested in requesting funding from the Trust should be directed to: Frederick D. Ballou, 230 Congress St., Boston, MA 02110, telephone (617) 523-6531.

The **Charles Sumner Bird Foundation** (no web page) makes grants primarily to environmental groups and projects located in southeastern Massachusetts and adjacent areas. Organizations interested in requesting funding from the Foundation should contact Brian P. Collins, Mellon Trust of New England, at (617) 722-7217 or c/o BNY Mellon Center, 201 Washington Street, Boston, MA 02108.

The Clara B. Winthrop Trust (no web page) makes grants to Massachusetts-based conservation and other organizations, primarily located in Boston and the North Shore. Requests for funding should be submitted to: Oliver A. Spaulding, c/o Welch Forbes, 45 School St., Boston, MA 02108, (617) 523-1635. Applications may be submitted in any form which reasonably informs the trustees of the tax-exempt status of the applicant, its general financial situation and the reason the grant is requested.

The **Dr. Harry M. Day Foundation** (no web page) makes conservation, health and other grants to recipients in New England and elsewhere. Requests for funds should be submitted in writing, using a form available <a href="here">here</a> (scroll down to Exhibit E on p.20) and sent to Pete Lapp, 129 Wisteria Drive, Longwood, FL 32779. Telephone: (321) 972-6592.

The **Edward H. Mank Foundation** (no web page) has made charitable contributions to health and environmental organizations, primarily in the Boston area. Requests for funding should be submitted in writing to: Donald Himmelsbach, 1430 Massachusetts Ave., Cambridge, MA 02138 Telephone: (617) 576-3200. There are no particular application forms, grant limitations or deadlines.

The **Gryphon Fund** (no web page) has made grants to river conservation and other nonprofit organizations in New England and elsewhere. Requests for funding should indicate the purpose for which funds are sought as well as include evidence of the organization's tax-exempt status. Send to: Helen B. Kaplan, 36 Drumlin Road, West Simsbury, CT 06092-2906. Telephone: (860) 658-5433.

The Xerox Foundation provides funding to a variety of social, civic and cultural organizations that provide broad-based programs and services in cities where Xerox employees work and live (which includes greater Boston and Worcester) as well as programs responsive to the national concern for the environment. No specific application form is required; requests for grants/funding should be submitted in letter form describing the project or program. This request should contain the legal name of the organization, the official contact person, its tax- exempt status, a brief description of its activities and programs, the purpose for which the grant is being requested, the benefits expected, the plans for evaluation, the projected budget, and the expected sources and amount of needed funds. Also, any additional factual material related to the organization or the request that may be useful for evaluation, a copy of the latest annual financial statement should be included. Send all proposals and requests to: Dr. Joseph M. Cahalan, President, Xerox Foundation, 45 Glover Avenue/P.O. Box 4505, Norwalk, CT 06856-4505.

The Sedona, AZ-based New Earth Foundation envisions "a more evolved human consciousness, manifesting as universal respect for all life, worldwide responsible stewardship of Earth's resources and the common realization that humanity is one of many threads in the beautiful tapestry of creation". The Foundation makes grants throughout the U.S. and are given predominantly, although not exclusively, to newer and smaller organizations. Click <a href="here">here</a> to read the grant guidelines, <a href="here">here</a> to see past grant recipients, <a href="here">here</a> to begin the online application process, or write <a href="here">newearthfoundation@foundationsource.com</a> or call (800) 839-1754 for more info.

The mission of the **Eastern Bank Charitable Foundation** is "to contribute, in a meaningful way, to the health and vitality of the various eastern Massachusetts communities" served by **Eastern Bank**. As the Foundation's grantmaking falls primarily into the categories of human services, families/children and health care, prospective applicants might want to emphasize how the projects they seek funding for would provide benefits in one or more of those categories. Applications may be submitted online at any time (click <u>here</u> for written instructions). To learn more, click <u>here</u> or contact Laura Kurzrok, Eastern Bank Charitable Foundation, 195 Market Street, EP5-02, Lynn, MA 01901, (781) 598-7595, L.Kurzrok@easternbank.com.

The <u>Deutsche Bank Americas Foundation</u> occasionally accepts unsolicited proposals from 501(c)(3) nonprofit organizations that meet the criteria outlined in the <u>Foundation's guidelines</u>. Grant seekers should send a **letter of intent**, not to exceed three pages, providing: a brief statement of the organization's history, mission and objectives; the purpose of the proposed project (goals/projected outcomes); and the amount and duration of the financial request, along with a copy of the IRS determination letter substantiating 501 (c) (3) status. Foundation staff will review all submissions and invite selected organizations to apply for funding. Please direct inquiries to: Deutsche Bank Americas Foundation, 60 Wall Street, NYC60-2112, New York, NY 10005.

Two grant-making entities with similar names, the **Kendeda Fund** (c/o Foundation Source, 501 Silverside Road, Suite 123, Wilmington, DE 19809-1377, (800) 839-1754) and the **Kendeda Sustainability Fund** (a donor-advised fund of the <u>Tides Foundation</u>), neither of which have web pages, nevertheless have made sizable grants to environmental, civic and other causes. While neither funding entity appears open to receiving unsolicited grant proposals, it is possible that a letter of inquiry might receive a favorable response. Click <u>here</u>, <u>here</u> and <u>here</u> for more info, or contact Diane Ives c/o Diane Ives Consulting, 122 Park Avenue, Takoma Park MD 20912, (301) 270-2206, <u>dives@igc.org</u>.

Last but not least: the <u>Foundation Source Access</u> website, established by the Fairfield, CT-based grant-making entity management company <u>Foundation Source</u>, is a place where <u>nonprofits can post info about themselves</u> and their projects so that prospective donors can find out about them (see, e.g., the <u>Toxics Action Center</u>'s profile). The posted info is also categorized (see, e.g., the <u>environment and health category</u>). Click <u>here</u> for more info.



#### Calendar

(sorted chronologically by date of event, submission deadline, etc.)

Interest in river restoration has grown exponentially in Massachusetts over the last few years. Dam owners, communities, non-profits and government agencies are removing dams in order to restore rivers and eliminate threats to public safety. In *Towards A Free-Flowing Ipswich River*, an evening talk sponsored by the *Ipswich River Watershed Association* (IRWA) and taking place on **Wednesday, February 8** beginning at 7:00 PM at Riverbend, IRWA's headquarters, Beth Lambert from DER and IRWA's Brian Kelder will explore opportunities to restore the Ipswich River by removing aging dams. They will discuss: 1) the role and function of dams; 2) how dams impact river ecosystems; 3) the dam removal process; and 4) dam removal projects in the Ipswich River Watershed. RSVP to Cynthia at <a href="mailto:cingelfinger@ipswichriver.org">cingelfinger@ipswichriver.org</a> or (978) 412-8200 ext. 15, or click <a href="mailto:here">here</a> for more info.

The annual **Southeastern Massachusetts Land Trust Convocation** is scheduled to take place on **Saturday, February 11, 2012** from 8:30 AM to Noon at the <u>Canal Club Facility, Trowbridge Rd off Bourne Bridge Rotary,</u> <u>Quality Inn Hotel in Bourne,</u> located off the Bourne Bridge Rotary. Topics to be covered include: how to deal with property violations and fund stewardship; the new Massachusetts tax credit incentive for conservation donations; developing good governance policies for your organization; and using new media to reach out to your members and others. Click <u>here</u> for more info.

Also on **Saturday, February 11** is the <u>7th Annual Merrimack River Eagle Festival</u>, sponsored by <u>Mass. Audubon's Joppa Flats Education Center</u>. In the deep winter of February, when everything else is frozen and asleep, the Newburyport area along the river is alive with the spectacular sight of wintering bald eagles flying, fishing, and sitting in the sun. Staff and volunteers from Joppa Flats and the Parker River National Wildlife Refuge help visitors find eagles and other winter specialties and answer questions about behaviors and habitats. Visit eagle hot spots at your own speed or go on an eagle tour to see birds in the wild; come indoors for nature activities or to see an up-close view of rehabilitated hawks, owls, and eagles. This is a great opportunity to learn about the

magnificence of nature by observing bald eagles and the habitats they need to survive. Click <u>here</u> for more info on this free, family-friendly event.

Water quality standards are the building blocks for all kinds of efforts to protect and restore our rivers, lakes and wetlands. Water quality standards establish the uses we make or want to make of our rivers (from swimming to trout habitat to irrigation) and set limits for pollutants and other parameters necessary to make rivers safe for those uses. In addition, standards establish policies that help keep clean waters clean. River Network is offering a free introductory webinar on water quality standards on Wednesday, February 15 beginning at 12:00 Noon. Click here to sign up or for more info, and here for more info on past and future webinars offered by River Network.

The Environmental Leadership Program (ELP) is hosting a free webinar entitled <u>New Uses for Public Spaces:</u> reinventing neighborhoods through park revitalization on February 22, 2012 at 12:00 Noon. The webinar features ELP Senior Fellow Tammy Leigh DeMent, the Philadelphia Green Parks Revitalization Manager at the Pennsylvania Horticultural Society. Click <u>here</u> to sign up for the webinar and <u>here</u> for more info on <u>ELP's</u> Fellowship Program.

In 2012, the <u>Buzzards Bay Coalition</u> will host its <u>annual decision maker workshop series</u> focusing on <u>habitat</u> restoration. The <u>free, three part workshop series</u> will include site visits, lectures, and discussions and will help participants answer the following questions: Why Restore: What are the ecological benefits to natural resources? Restoration in the Community: What are the safety and economic concerns and benefits of restoration projects? and Making Restoration Happen: How are these projects implemented in my community and what is my role in their success? One of the keynote speakers will be Tim Purinton from DER. The workshops will take place on <u>Thursday March 1</u>, <u>Thursday March 22</u>, and <u>Thursday April 5</u>. Click <u>here</u> or contact Shannon McManus at <u>mcmanus@savebuzzardsbay.org</u> or (508) 999-6363 ext 226 to sign up or for more info.

The Mass. Association of Conservation Commissions (MACC) will hold its 2012 Annual Environmental Conference on Saturday, March 3 at the Hogan Campus Center at the College of the Holy Cross in Worcester. Session topics taught by DER staff include: Trees, Paddlers & Wildlife: Safeguarding Ecological & Recreational Values on the River (Russ Cohen); Fluvial Geomorphology Basics: Understanding a River's Form & Function (Beth Lambert) and Big Dam = Big Challenges? Lessons Learned from the Briggsville Dam Removal Project (Nick Wildman). Click here to register or for more info.

Environmental Action: Celebrating 25 Years of Mobilizing the Grassroots for a Safer, Greener New England, the 2012 version of an annual conference sponsored by the Toxics Action Center, is scheduled to take place on Sat. March 3 at Northeastern University in Boston. Click here or call (617) 292-4821 for more info.

OARS: For the Assabet, Sudbury and Concord Rivers will be once again hosting a local showing of the **2012 Wild and Scenic Film Festival** the evening of **Wednesday, March 7** at the Fine Arts Theatre in Maynard. Click here for more info on OARS' event, here to learn more about the films that are part of the Festival, and here to learn about other Festival venues (including one in Boston scheduled for **March 31**).

The Ecological Landscaping Association (ELA)'s 18th Annual ELA Conference and Eco-Marketplace: Coming Full Circle: Origins and Destinations, will be taking place from Wed. March 7 – Thurs. March 8 at the MassMutual Center in downtown Springfield. Wednesday offers two intensive tracks: "Pro"active Protection of Wetlands: Conservation and Landscape Professionals Collaborate and Bringing Life to Urban Landscapes: New Ideas in Urban Ecology. The keynote luncheon features Mike Clough, international invasives authority from the United Kingdom, talking about successful control methods for Japanese Knotweed. Thursday's program includes three concurrent education tracks covering a wide range of leading-edge topics, plus demonstrations, screening room, and an Eco-Marketplace showcasing ecological products, services, and technologies. When the Marketplace closes, enjoy a Jazz

Social Hour. Wrap up your day with dinner and a keynote presentation by author and landscape designer <u>Ben Falk</u> of <u>Whole Systems Design</u>. Click <u>here</u> to download the full conference brochure and registration forms.

The <u>2012 Rhode Island Land and Water Conservation Summit</u> will be taking place on **Saturday, March 10** at the <u>URI Memorial Union, Kingston, RI</u>. The keynote speaker, Mayor Lisa Wong of Fitchburg, MA, will talk about *Urban Conservation as a Revitalization Strategy*. **Many of the 30 workshop session topics are applicable to Massachusetts land and water conservation organizations and/or projects**. Click <u>here</u> to see the Summit At A Glance, <u>here</u> to access the Full Program, <u>here</u> to register on-line and <u>here</u> for a print and mail-in registration form, or contact Meg Kerr at the Narragansett Bay Estuary Program at (401) 714-2313 or <u>megkerr@cox.net</u> for more info.

Every year, hundreds of people round the world lift their voices to celebrate the world's rivers and the thousands of people who struggle to protect them on the *International Day of Action For Rivers*. This annual event, organized by International Rivers and taking place this year on Wednesday, March 14, is a day to celebrate victories such as dam removal and river restoration. Find out how to plan your own event or participate in others' organized events by clicking here visiting the Day of Action For Rivers Facebook page or reading the Day of Action blog.

The 2012 Annual Conference of the Massachusetts Environmental Education Society (MEES), Refresh:

New Tools & Techniques for Today's Educators, will be taking place on Wednesday, March 14 at the Hogan

Campus Center at the College of the Holy Cross in Worcester. Several of the workshop sessions are relevant to rivers, wetlands and watersheds. Click here to download a copy of the conference brochure and here to register.

Hosted by <u>U.S. EPA Region One/New England</u>, the <u>36th Annual Meeting of the New England Association of Environmental Biologists</u> (NEAEB) is scheduled to take place from Wed. March 21–Fri., March 23 at the SeaCrest Hotel and Conference Center in Falmouth, MA. NEAEB brings seasoned and emerging professionals together from State and Federal government, academia, non-governmental organizations, and from other public and private sector institutions to deliver and discuss presentations on current topics relating to environmental protection, conservation, and water resource management. The 2012 NEAEB conference is a great place for networking and formal information sharing through presentations and technical workshops and enjoying informative plenary and poster sessions. Click <u>here</u> for more info and <u>here</u> for the **call for abstracts** (accepted until **February 10**).

The Mystic River Watershed Association (MyRWA) will be hosting a screening of the 30-minute, award-winning documentary film Marion Stoddart: The Work of 1000 on Thursday, March 22 at the Capitol Theatre in Arlington, beginning at 7:00 PM. The screening will be followed by a lively personal discussion with the film's central figure, world-renowned local citizen leader, Marion Stoddart. The Work of 1000 is an exhilarating success story of how one woman mobilized clean-up of one of America's most polluted rivers-for herself, for her community, and for future generation-and became a citizen leader honored by the United Nations. It's a gripping account of an ordinary person who realized her power to make a difference. Click here to order tickets or for more info.

The Mid-Atlantic Chapter of the Society for Ecological Restoration (SER), in collaboration with the SER New England Chapter, will be hosting its 7th Annual Conference: Restoration on the Edge: Exploring the frontiers of restoration, collaboration, and resilience in changing ecosystems, from March 23-24, 2012 at Brooklyn College, City University of New York. The first day will be devoted to presentations and posters on these and related topics:

- Prevention and restoration of biodiversity loss
- Ecosystem resilience
- Novel ecosystems
- Global climate changes affecting ecological community composition

- Trends in invasive species distribution related to urban systems
- Design of sustainable landscapes
- Green infrastructure connections to ecological restoration
- Agro-ecology connections to ecological restoration
- Management of sites experiencing ecological change
- Ecosystem services and economics
- Re-establishing landscape connectivity
- Successes, failures, and current status of restoration projects (case studies welcome)
- Design of future restoration projects

The second day will be devoted to field trips. Approximately 300 restoration practitioners, scientists, administrators, environmental engineers, landscape architects, land stewards, students, and others are expected to attend the conference. DER's Alex Hackman has been invited to speak about the Eel River Restoration. Click <a href="here">here</a> or contact Laura Whalen at <a href="here">lwhalen@delawareestuary.org</a> for more info.

The <u>2012 Massachusetts Land Conservation Conference: Working Lands: Farms, Forests & Conservation</u> will take place on **Saturday, March 24** at the Worcester Technical High School. Click <u>here</u> to register or for more info.

<u>Project Native</u>, a horticultural farm and wildlife sanctuary growing native plants in Southern Berkshire County, will present its <u>2nd Annual Environmental Film Festival</u> on Sunday, March 25th at the <u>Triplex Cinema</u> in Great Barrington. Films on a variety of topics, from 90-minute features to a series of short films for children, will inspire, enrage, and motivate audiences to engage. Click <u>here</u> or contact Karen Lyness LeBlanc at (413) 274-3433 or <u>projectnative@verizon.net</u> for more info.

The *First Massachusetts Sustainable <u>Campuses</u> Conference* and the *Second Massachusetts Sustainable <u>Communities</u> Conference* will be taking place at the UMass/Boston Campus Center on April 20 and April 21, 2012 respectively. Click <u>here</u> or contact Conference Director Jen Boudrie at <u>JenBoudrie@gmail.com</u> or (508) 481-0569 for more info.

The <u>River Management Society</u> (RMS) will be hosting the <u>2012 North American River Management</u> <u>Symposium: from intimate creeks to the infinite sea</u>, from April 24–26 in Asheville, NC. Click <u>here</u> for more info.

#### **On-line Resources**

The <u>blog</u> reporting on the activities of the <u>Cape Cod Water Resources Restoration Project</u>, coordinated by the <u>Mass. Office of the USDA's Natural Resource Conservation Service</u> (MA NRCS), in partnership with a number of regional and statewide programs (including DER), recently reported on several newly-completed water quality improvement projects in <u>Paine's Creek and Saint's Landing Beach in Brewster</u>, <u>Barley Neck in Orleans</u> and at <u>Duck Creek in Wellfleet</u>.

The U.S. EPA's Assessment and Watershed Protection Division recently announced the release of its Recovery Potential Screening website, a new technical assistance tool for surface water quality protection and restoration programs. Recovery Potential Screening is a user-driven, flexible approach for comparing relative differences in restorability among impaired waters. The website provides step-by-step instructions in recovery potential screening, time-saving tools for calculating indices and displaying results, summaries of over 120 ecological, stressor and social indicators, a recovery literature database, and several case studies. Practical applications include: assisting watershed-level programs that need to focus on priority places due to limited resources; developing a 303(d) impaired waters list prioritized schedule; prioritizing implementation among many

TMDLs; planning statewide nonpoint source control projects and restoration initiatives; helping develop strategies to meet performance tracking measures; identifying opportunities for synergy between healthy watersheds protection and impaired watersheds restoration; and revealing underlying factors that influence restoration success to improve programs. Click here or contact <u>Doug Norton</u> at (202) 566-1221 for more info.

Expanding water reuse--the use of treated wastewater for beneficial purposes including irrigation, industrial uses, and drinking water augmentation--could significantly increase the nation's total available water resources. Water Reuse: Potential for Expanding the Nation's Water Supply through Reuse of Municipal Wastewater, a report released earlier this month by the National Research Council, presents a portfolio of treatment options available to mitigate water quality issues in reclaimed water along with new analysis suggesting that the risk of exposure to certain microbial and chemical contaminants from drinking reclaimed water does not appear to be any higher than the risk experienced in at least some current drinking water treatment systems, and may be orders of magnitude lower. This report recommends adjustments to the federal regulatory framework that could enhance public health protection for both planned and unplanned (or de facto) reuse and increase public confidence in water reuse. Click here to read more about the report and here to download a copy.

The EPA's recently established <u>The Eco Student Blog</u> is an on-line place to read about what kids are doing to protect the environment. Teachers, students, parents are encouraged to pass along their favorite websites about nature, plants, or water for possible inclusion in a future blog entry. The blog also <u>welcomes postings by kids 13 and up</u> describing an environmental service project or other environment-related activity they are involved in. Contact Environmental Education and Outreach Coordinator Wendy Dew at <u>dew.wendy@epa.gov</u>, (303) 312-6605 (office) or (303) 532-7729 (cell) for more info.

Most federal (and many state) actions against businesses or individuals for failure to comply with environmental laws are resolved through settlement agreements. As part of a settlement, an alleged violator may voluntarily agree to undertake (or provide funding for others to undertake) an environmentally beneficial project related to the violation in exchange for mitigation of the penalty to be paid. The term that is often used to describe such an arrangement is a <u>Supplemental Environmental Project</u> (frequently referred to by its acronym, "SEP"). The enforcement staff at the U.S. EPA (and occasionally other federal agencies) and the Mass. DEP (and analogous agencies in other states), and/or the alleged environmental violator(s), will from time to time propose and seek to negotiate a SEP in place of all or a portion of a monetary fine. [Click here to read MassDEP's current SEP policy and here for examples of past SEPs approved by MassDEP. More info on past EPA-approved SEPs can be obtained by clicking here. Click here to read a slightly dated (2002) but still useful article on SEPs appearing in <u>Stormwater</u> Magazine.]

While one or more of the negotiators may already have ideas for what a Supplemental Environmental Project relating to a particular violation could be and who should undertake it, frequently they are open to ideas proposed by others. The EPA's Region One/New England office has set up a SEP idea data bank/library to solicit project ideas so that they are readily accessible to the negotiators who are often under time constraints to hammer out a settlement agreement. Some groups are taking a similar initiative on their own. The Mystic River Watershed Association (MyRWA), a group that has already benefitted from the receipt of funds to carry out SEPs (click here to read a recent example), recently put out a call for ideas for projects that it intends to assemble into a list of Supplemental Environmental Projects (SEPs). It is hoped that these listed projects will be used to fulfill a need of corporations, institutions and/or community organizations that have been required or who wish to fund projects to restore environmental conditions in the Mystic River Watershed. Other groups might be well-advised to follow MyRWA's lead, so they and/or the environmental projects they think are worth doing are well-positioned to benefit from SEPs.

Federal agencies and their partners collect and manage large amounts of geospatial data - but this data is often not easily found when needed or accessible in useful forms. The **Geospatial Platform** website provides ready access to federally maintained geospatial data, services and applications, as well as access to data from partners across state, tribal, regional and local governments as well as non-governmental organizations. The website makes it

possible for users to create customized maps, or to integrate their own data into the maps, and share the maps through web browsers and mobile applications.

The <u>Federal Emergency Management Agency</u> (FEMA), the agency responsible for preparing for and responding to <u>floods</u> and other natural disasters and issuing <u>flood insurance maps</u>, has launched a new online initiative to generate creative ideas for strengthening emergency management and improving this nation's capacity to prepare for, respond to, and recover from disasters. The <u>FEMA Think Tank</u> is a forum developed to engage FEMA partners, promote innovation, and facilitate emergency management discussions. FEMA is reaching out to state, local, and tribal governments and to all members of the public, including the private sector, disability community, and volunteer community, to seek their input on how to improve the emergency management system. To participate, visit <u>FEMA's Collaboration Community</u>.

The November, 2011 edition of the National Park Service Rivers and Trails Conservation Assistance Program (RTCA)'s Conservation + Recreation electronic newsletter contains an interesting article entitled Tools For the Trail: QR Codes, which explains the potential utility of "Quick Response" (QR) Codes in informing and communicating with the visitors to public and private parklands and other conserved landscapes. Click here to access this and past editions of Conservation + Recreation, many of which also contain writeups of useful tools and case studies, and here to read about the RTCA's current projects in Massachusetts. [See also the RTCA's Facebook page and an article about how other groups use Facebook.]

The focus of the Winter 2011-12 edition of the Narragansett Bay Journal, put out by the Narragansett Bay Estuary Program, is on trash and waste: how it affects the Bay and what is being done about it. Articles include making art from trash, managing pet waste on beaches, and generating power from cow manure. Click here to download the entire issue (well worth reading).

The <u>Massachusetts Geographic Information System</u> (MassGIS)'s <u>GISette</u>, a bi-monthly newsletter produced by <u>Paul Nutting</u>, is e-mailed to more than 1,800 members of the geospatial community to keep them informed of data updates, activities at MassGIS, general GIS events, GIS-related news from other Mass. state agencies, and on-going technology developments. The most recent and archived editions of the <u>GISette</u> are also accessible on-line, as well as an <u>online subscription form</u>.

# Non-government On-line Resources

(in rough alphabetical order – the following are offered for information purposes only and are not an endorsement of the items listed below)

#### America's Backvard

http://www.americasbackvard.org

Recently established as a grassroots initiative of the <u>National Recreation and Park Association</u> (NRPA), America's Backyard is intended to <u>strengthen the pro-park constituency</u> strengthen the pro-parks constituency through raising the public profile of parks and the many <u>benefits they bestow on communities</u>. Resources at the web page include <u>research papers on the values of parks</u> and downloadable copies of the NRPA's <u>Park Advocate Handbook</u> and the 72-page report <u>Rejuvenating Neighborhoods and Communities Through Parks—A Guide To Success</u>.

#### Cauzoom

http://cauzoom.com/

The recently launched, Cambridge-based Cauzoom is an online community funding tool for groups of people who want to pool their resources to improve their neighborhoods. Cauzoom makes it fun and easy to create projects that improve communities and share them with social networks to raise awareness and support. Environmental and other groups can use Cauzoom to propose community betterment projects they'd like to raise money for, and 100%

of any proceeds raised go to that project. Also available at the Cauzoom website is a <u>downloadable white paper on community cause marketing</u>. [Click <u>here</u> to read a recent *Boston Globe* article mentioning Cauzoom.]

#### CommunityRoom.net

https://www.communityroom.net

Because many Nonprofits do not have the resources to launch their own Internet site, CommunityRoom.net was created to provide them with the opportunity to have a hosted web site with on-line giving capabilities. Partners maintain their own hosted web site through a simple online interface; they can change or update the information on their site whenever and as often as they want. Prospective donors and volunteers use CommunityRoom.net to donate and/or find out more info about nonprofits as well as find out about volunteer opportunities and events. Organizations currently participating in CommunityRoom.net include OARS: For the Assabet, Sudbury, and Concord Rivers, Friends of Alewife Reservation and the Trust for Public Land.

#### **Conservation Finance Forum**

http://www.conservationfinanceforum.org

Recently established by a collaboration of over a dozen groups and individuals and housed within Harvard's Ash Center for Democratic Governance and Innovation, the key focus of the CFF website is on techniques and practices that are innovative, and that bring innovative twists to tried and true conservation finance practices. The website will serve as a clearinghouse and repository of information on conservation finance ideas that are novel, significant, measurably effective, transferable and have an ability, or at least the potential, to endure. Current useful info posted to the CFF website includes a conservation finance resources page, the Report Of The Massachusetts Commission on Financing Forest Conservation and the related Financing Forest Conservation in Massachusetts, featuring many links to more info on that subject. Here you can also subscribe to the Conservation Innovation Update electronic newsletter, where you will learn about tools and programs such as the recently-conducted webinar A Tale of Two Rivers.

#### ConservationTools.org

http://conservationtools.org

Managed by the <u>Pennsylvania Land Trust Association</u>, the Conservation Tools website hosts many resources relevant for land trusts and other conservation organizations and communities in Massachusetts and elsewhere. These include articles on <u>community visioning</u>, <u>cost of community services studies</u>, <u>costs of conservation easement stewardship</u>, <u>pledges and donation agreements</u> and the potential pitfalls of <u>commission-based compensation for fundraising and development professionals</u>.

# Deerfield River Watershed Association (DRWA) 's Macroinvertebrate Monitoring Program <a href="http://www.deerfieldriver.org/maps/index.html">http://www.deerfieldriver.org/maps/index.html</a>

The DRWA's <u>benthic macroinvertebrate</u> (BMI) monitoring program's web page provides info on the past and current conditions of these organisms living in the rivers and streams of the <u>Deerfield River watershed</u>, where they serve as a <u>key indicator of ecological health</u>. Resources at this page include info about the <u>monitoring protocol</u> the DRWA uses, links to past <u>reports</u>, and (most notably) a <u>new interactive map of the watershed</u> that depicts all of the DRWA's monitoring sites and allows the user to rapidly retrieve and view information and data from each monitoring site. This nifty mapping tool is worthy of emulation by other monitoring programs.

#### Easymeasure

http://itunes.apple.com/us/app/easymeasure/id349530105?mt=8&ls=1

A Free app from the IPhone App store, EasyMeasure shows you the distance to objects seen through the camera lens of your iPhone. Simply aim your iPhone to any object in your surroundings, and EasyMeasure displays the

distance towards that object on top of the camera image. With its amazing 3D camera overlay grid, using EasyMeasure is very intuitive and easy. DER staff have found this app to be useful in taking distance measurements in the field.

#### **EcoWatch**

## http://ecowatch.org

Launched this past October by the <u>Waterkeeper Alliance</u>, Ecowatch is an environmental news service intended to act as a hub for environmental news stories and other content (see, for example, these <u>water-related items</u>). EcoWatch seeks to unite the voice of the grassroots environmental movement and mobilize millions of people to engage in democracy to protect human health and the environment, and is currently the only media source to focus exclusively on the news from more than 1,000 environmental organizations across the country. In addition, the site showcases original content in its Insights column from leading national voices in the environmental movement, including EcoWatch's advisory board members—Wendy Abrams, Ed Begley, Jr., Lester Brown, Laurie David, Paul Hawken, Randy Hayes, Robert F. Kennedy, Jr., Phil Radford, Laura Turner Seydel and Harvey Wasserman. The EcoWatch team also invites submissions from you, especially **original content**, meaning something you have written personally. This can be an Op-Ed piece, a retooled pre-press release, a reworked post-press release as follow-up to an event, and environmental essays on a timely issue. You can send your original content to <u>Stefanie Spear</u> via e-mail, or you can submit material directly via this <u>on-line link</u>.

## greenmuseum.org

http://greenmuseum.org

Founded in 2001 and based in northern California, greenmuseum.org, is a 100% volunteer-run **online museum of environmental art**. Its goal is to inform, inspire and connect people through environmental art and encourage the creation of new work that serves communities and ecosystems. The website has three main sections: **Artists**, which presents images and documentation of artwork, writings and online exhibitions; **Community**, which provides a full listing of Events and Opportunities, and **Links**. Greenmusuem.org also encourages others to <u>send in info</u> about environmental art-related events and other items of interest. Read the <u>FAQ</u> page or write to <u>info@greenmuseum.org</u> for more info.

#### HandsOn Network

http://www.handsonnetwork.org

The volunteer-focused arm of <u>Points of Light Institute</u>, HandsOn comprises a powerful network of more than 70,000 corporate, faith and nonprofit organizations that are answering the call to serve and creating meaningful change in their communities. Annually, the network delivers approximately 30 million hours of volunteer service valued at about \$600 million. HandsOn maintains over 200 <u>Action Centers</u> (including <u>four in Massachusetts</u>) as well as a <u>volunteer matching portal</u> to enable individuals and groups to find rewarding volunteer opportunities. HandsOn also coordinates the annual <u>National Volunteer Week</u>, taking place this year from **April 15-21**.

#### **Home Water Works**

http://www.home-water-works.org

<u>Recently launched</u> by the nonprofit <u>Alliance For Water Efficiency</u>, <u>Home Water Works</u> gives consumers the best and most relevant information about conserving water at home, and offers <u>water saving tips</u> and information about every major water-using fixture and appliance found in homes today. The new website features a <u>household water</u> calculator, which enables anyone to determine household water usage and how it compares to others.

#### Lawyers Clearinghouse Legal Assessment Program

http://www.lawyersclearinghouse.org/for-lawyers/legal-assessment-program

Established last fall by the <u>Lawyers Clearinghouse</u>, this new service functions as a preventative "check-up" for nonprofit organizations. Volunteer lawyers will review and evaluate the corporate governance of nonprofits to identify and remedy potential legal issues, ensure that legal requirements are met, and suggest best practices for governance. Legal issues covered by the assessment may include:

- Legal Formation and Governance
- Internal Controls and Procedures
- Appropriate Insurance Coverage
- IRS and State Filing Compliance
- Employment Practices
- Privacy and Data Security
- Fundraising Activities
- Material Contracts

Participating nonprofits can expect to strengthen their governance and management practices, resolve legal issues before they become legal problems, and ensure the health and vitality of their organization for the future. Click here to apply for assistance or contact Machiko Sano Hewitt at (617) 778-1954 for more info.

# National Coalition for Dialogue & Deliberation (NCDD)

http://ncdd.org

NCDD promotes the use of dialogue, deliberation, and other innovative group processes to help people come together across differences to tackle our most challenging problems. The NCDD's website serves as a gathering place, a resource clearinghouse, a news source, and a facilitative leader for the dialogue and deliberation community and beyond. Resources at ncdd.org include a community blog, a searchable resource center on dialogue, deliberation and public engagement (see, for example, an archived webinar entitled Civic Engagement for Rivers), and an opportunity to connect, share info with and get advice from many other groups engaged in these activities. [Click here to download a copy of the NCDD's useful 2010 publication Resource Guide on Public Engagement.]

## Photosynth

http://www.photosynth.net

A Microsoft product, Photosynth is a powerful set of tools for capturing and viewing the world in 3D. You can share these views with your friends on Facebook, publish them to Bing Maps, or embed them in your own Web site. You can use Photosynth to create **panoramas**, when you can capture everything from a single location with a single zoom level, or **synths**, which are useful for capturing different sides or details of an object. [Click <a href="here">here</a> to read about "gigapanning", another on-line tool to assist in stitching together panoramic photos.

#### The Rivers' Calendar

http://www.riverscalendar.org

Trout Unlimited, the University of Massachusetts and several other partners are teaming up to explore the **impact** of climate and other environmental changes on trout fishing. Are fishing seasons on our favorite rivers changing because of shifting hatch calendars, temperature and flow regimes? To help answer these questions, **The River's Calendar** program will recruit anglers to start documenting hatch dates and share other observations on rivers and trout fishing through the seasons. While the Calendar is currently in the "pilot" stage (supported by <u>TU's Pioneer Valley Chapter</u> and by TU's Oregon Council), it is hoped that it will expand into a nationwide program. The pilot organizers' goal is to begin data collection in the 2012 fishing season. This will require some preparation over the winter – primarily identifying locations and insect species to target, and testing data collection and communication strategies. If you are interested or want to learn more about this exciting project, please contact Jerry Schoen at <a href="mailto:ischoen@tei.umass.edu">ischoen@tei.umass.edu</a> or (413) 545-5532. [Click <a href="mailto:here">here</a> to see the "beta" version of <a href="mailto:TU's new Community website">TU's new Community website</a>, which is intended to serve a similar info-sharing purpose).

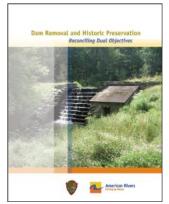
#### Slideshare

#### http://www.slideshare.net

SlideShare is an <u>online tool for sharing presentations</u>, <u>documents</u>, <u>PDFs</u>, <u>videos and webinars</u>. Individuals & organizations upload documents to SlideShare to share ideas, conduct research, connect with others, and generate leads for their work. Anyone can view presentations & documents on topics that interest them, download them and reuse or remix for their own work (see, for example this <u>presentation on building rain gardens</u>). SlideShare users regularly comment on, "favorite" and download content. SlideShare content spreads virally through <u>blogs</u> and social networks such as LinkedIn, Facebook and Twitter.

## Publications, Videos, etc.

(the following are offered for information purposes only and are not an endorsement of the items listed below.)



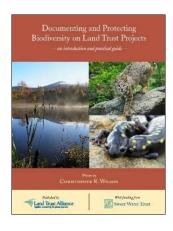
Removing a dam can provide many benefits, such as allowing migratory fish species access to historic spawning grounds, improving water quality and the natural movement of sediment and other nutrients, and reestablishing the natural flow regime [click <a href="here">here</a> for more info about the adverse impacts of dams and the benefits of dam removal]. However, restoring environmental balance to our nation's rivers may affect historic structures and archaeological sites, triggering state and federal historic preservation laws, and interest in preserving a piece of local history, as well as providing an opportunity for historic discovery. <a href="Dam Removal and Historic Preservation: Reconciling Dual Objectives">Dam Removal and Historic Preservation: Reconciling Dual Objectives</a>, a report put out by <a href="American Rivers">American Rivers</a> in cooperation with the <a href="National Park Service">National Park Service</a>, was written because too often advocates for river restoration through dam removal find themselves in the middle of a project and at odds with potential partners

over matters of historic preservation. Dam removal proponents need to better understand the processes established to protect historic values so they can work more effectively in partnership with historic preservation interests to establish and achieve mutual goals. Click <a href="here">here</a> to read the intro and <a href="here">here</a> to download the full document in .pdf format.

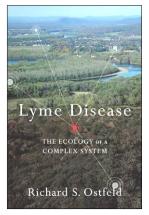


The recently-published report <u>Factors Influencing Riverine Fish Assemblages in Massachusetts</u> presents the findings of an investigation of fish assemblages in small- to medium-sized Massachusetts streams conducted by the USGS in cooperation with the Mass. Departments of Conservation and Recreation (DCR), Environmental Protection (DEP) and Fish and Game (DFG), The objective of this study was to determine relations between fish-assemblage characteristics and anthropogenic factors, including impervious cover and estimated flow alteration, relative to the effects of environmental factors, including physical-basin characteristics and land use. The analysis of the data revealed that as percent impervious cover and alteration of August median flow from groundwater withdrawals increase, the relative abundance and species richness of fluvial (riverine) fish decrease. Specifically, a 1% increase in the percent depletion of August median flow was found to result in a 0.9% decrease in the relative abundance (in counts per hour) of fluvial

fish, and a 1% increase in impervious cover resulted in a 3.7% decrease in the relative abundance of fluvial fish, a 5.4% decrease in fluvial-fish species richness, and an **8.7% decrease in brook trout** relative abundance. The study also found that coldwater species richness increases with miles of interconnected (undammed) river network and decreases as the percent open water (impoundments) increases. Click <a href="here">here</a> to read the report abstract, <a href="here">here</a> to view a recent PowerPoint presentation based on the report, and <a href="here">here</a> to download the report in its entirety.

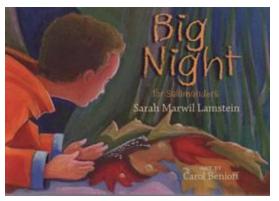


Intended for land trusts, landowners, biologists, planners, and students, <u>Documenting & Protecting Biodiversity on Land Trust Projects: an introduction and practical guide</u> explains what biodiversity is, how it's conserved, what types of biological information are most useful, and how to gather such information through reviews of freely-available data sources and on-the-ground biological inventories. The book also explains how to apply biological information to standard land protection tasks, such as project selection, fundraising, drafting conservation easement language, compiling baseline documentation, writing management plans, and how the information helps land trust projects conform to IRS Treasury regulations and Land Trust Standards and Practices. The book also explains the value of mapping and GIS as important tools for documenting biodiversity. Click <u>here</u> to order a hard copy and <u>here</u> to download a copy.

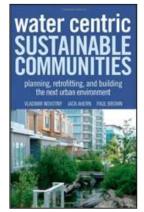


Most human diseases come from nature, from pathogens that live and breed in non-human animals and are "accidentally" transmitted to us. Human illness is only the culmination of a complex series of interactions among species in their natural habitats. To avoid exposure to these pathogens, we must understand which species are involved, what regulates their abundance, and how they interact. *Lyme Disease - The Ecology of a Complex System*, written by Dr. Richard S. Ostfeld of the Millbrook, NY-based Cary Institute of Ecosystem, Studies, is a comprehensive, synthetic review of research on the ecology of Lyme Disease in North America. It describes how humans get sick, why some years and places are so risky and others not. It offers a more nuanced view of the factors affecting the presence of the disease that goes beyond deer abundance to look at the complexity of plant and animal species and their interactions. [Click here to listen to a radio interview of Dr. Ostfeld about this book and here for info about a Lyme Disease prevention "app" developed at Yale.]

Could a new computer model help resolve the age-old conflict between roads and wildlife? The YouTube videos **Roads & Wildlife: Creating Critical Linkages in Massachusetts: Part 1** and **Part 2** describe a collaboration between the Massachusetts Chapter of The Nature Conservancy and the University of Massachusetts' River and Stream Continuity Project to pinpoint the most important connection points across Massachusetts and then prioritize them for action to mitigate (if not eliminate) the adverse impacts of roads and other human-built infrastructure on fish and wildlife movement at these key locations. Click here and here to see the videos.

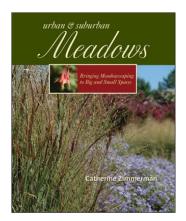


On the first rainy night in late winter or early spring, with temperatures around 40 degrees, spotted salamanders emerge from woodland burrows and crawl to vernal pools to mate and lay eggs. In *Big Night for Salamanders*, a children's book (for ages 7-9) by local author Sarah Marwil Lamstein, illustrated by Carol Benioff and winner of a 2011 Massachusetts Book Award (see also the companion classroom guide), this annual migration is viewed through the eyes of Evan, a youngster eager to assist the amphibians in their journey. Evan helps the salamanders cross the road without being squished (a real-life activity engaged in by many volunteers – see, e.g., vernalpool.org).



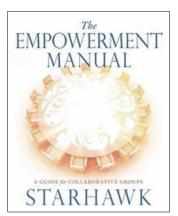
Water Centric Sustainable Communities: Planning, Retrofitting and Building the Next Urban Environment, co-authored by Northeastern U. Professor Emeritus Vladimir Novotny, UMass/Amherst Professor of Landscape Architecture Jack Ahern and Paul Brown, compartmentalizes the complex issue of water and wastewater into its discrete components: technology, planning policy, construction and economics. The book is the first to capture all of the current work on this idea in a single, integrated, plan for designing water-centric Cities of the Future. From new construction to the retrofitting of existing systems, this book presents the case for a new urban relationship to water, one with a more

sustainable connection to the environment. Through case studies of successfully planned and built systems around the world, the book informs the reader about the need for a new approach to urban water management, and makes the case that these changes are not only possible, but imperative. *Water Centric Sustainable Communities* is available in both <a href="https://doi.org/10.108/journal-10.1081

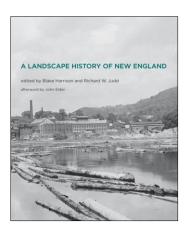


Before manicured lawns, with their chemicals, mowers, and blowers, there were ecological meadows, with their butterflies, birds, and bees. Catherine Zimmerman's Urban & Suburban Meadows: Bringing Meadowscaping To Big and Small Spaces reintroduces readers to the beauty and biodiversity of the meadow and reminds them of the intricate connections between wildlife and native plant communities that serve as both food source and habitat. Whether restoring a small urban pocket garden or reclaiming an acre of suburban lawn, this beautifully photographed book will compel readers to plant these living landscapes. Zimmerman provides both the inspiration and the thoughtfully developed and comprehensive practical steps necessary for success. Zimmerman is currently at work on The Meadow Project, a video companion to her book, to educate and raise awareness about how to create living, sustainable, organic landscapes in our backyards, schoolyards, churches and communities, and is seeking

funding through Kickstarter to complete the film.



Collaborative organizations have the unique potential to harness their members' ideals, passions, skills, and knowledge – if they can succeed in getting along together. The new book *The Empowerment Manual: A Guide for Collaborative Groups*, written by Starhawk (Miriam Simos), is a comprehensive guide for groups seeking to organize with shared power and bottom-up leadership to foster vision, trust, accountability and responsibility. *The Empowerment Manual* provides keys to understanding group dynamics, facilitating communication and collective decision-making, and dealing effectively with difficult people. Drawing on four decades of experience, Starhawk shows how collaborative groups can generate the cooperation, efficacy and commitment critical to success. Click here to order the book.



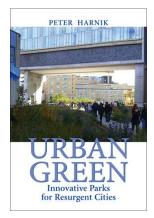
Recently published by the MTT Press, A Landscape History of New England goes beyond the well-known picture postcard-ready vistas of white-steepled churches, open pastures, and tree-covered mountains of the region to examine the Native American presence in the Maine Woods; offer a history of agriculture told through stone walls, woodlands, and farm buildings; and report on the fragile ecology of tourist-friendly Cape Cod beaches. Taken together, they offer a wide-ranging history of New England's diverse landscapes, stretching across two centuries. The book shows that all New England landscapes are the products of human agency as well as nature. The authors trace the roles that work, recreation, historic preservation, conservation, and environmentalism have played in shaping the region, and they highlight the diversity of historical actors who have transformed both its meaning and its physical form. Generously illustrated, with many archival photographs, A Landscape History of New

England offers readers a solid historical foundation for understanding the great variety of places that make up New England. Click <u>here</u> to order a copy and <u>here</u> to read a review of the book in the *Boston Globe*.

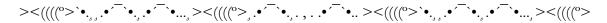


Americans use 60,000 plastic bags every five minutes – single-use disposable bags that we mindlessly throw away. But where is "away?" Where do the bags and other plastics end up, and at what cost to our environment, marine life and human health? The documentary film <u>Bag It</u> starts with simple questions: Are plastic bags really necessary? What are plastic bags made from? What happens to plastic bags after they are discarded? The film looks beyond plastic bags and discovers that virtually everything in modern society-from baby bottles, to sports equipment, to dental sealants, to personal care products-is made with plastic or contains potentially harmful chemical additives used in the plastic-making process. Click here to see the first three minutes of the film, here to read the Bag It blog, and here to host a screening using the helpful tool kit, or contact the film's producer, Michelle Hill, at bagitmovie@gmail.com for more info. [See also Message in the Waves, another documentary film focusing on the problems of plastic,

and the *Clean Bin Project*, a documentary about how (and why) to achieve a zero-waste lifestyle.



Ever seen a park over a freeway? On a rooftop? In a cemetery? What about replacing a railroad track – or even an abandoned airport? *In Urban Green: Innovative Parks for Resurgent Cities*, the Trust for Public Land's Peter Harnik shows that there's room for parks even in America's most "built-out" urban centers – you just need to know where to look. He also discusses the pitfalls of relying on traditional planning standards to determine how much parkland a city should have. Harnik draws on his experience as director of the Center for City Park Excellence to explore the frontier of urban park design and advocacy. Click here to order or for more info on *Urban Green*, and here to download another publication from the Center, *From Fitness Zones to the Medical Mile: How Urban Park Systems Can Best Promote Health and Wellness*.



The <u>Mass. Watershed Coalition</u> (MWC)'s <u>"mwc-list" listserv</u> is a great source of information on river- and watershed-related funding and job opportunities, upcoming events, recent articles and more. Many of the posted items are time-sensitive and can't wait until the next edition of *Ebb&Flow*. You can access the mwc-list listserv at <a href="http://lists.topica.com/lists/mwc-list@igc.topica.com">http://lists.topica.com/lists/mwc-list@igc.topica.com</a>, where you can subscribe to receive the posted messages to your e-mail address, or simply read them on-line. Highly recommended!



Coordinated by the Mass. Executive Office of Energy and Environmental Affairs (EEA), *The Great Outdoors Blog* is dedicated to Massachusetts outdoor activities, events, wildlife, state parks and local agriculture that features a **calendar of Massachusetts outdoor events**. Learn about native marsh species, guides for the state's best paddling adventures and learn about wetlands restoration projects that protect recreational and commercial fisheries. [Click here for the related "Green Massachusetts"

photo gallery.]

# **Division of Ecological Restoration Staff**:

Tim Purinton, *Director*Hunt Durey, *Acting Deputy Director*Carrie Banks, *Stream Team and Westfield River Wild and Scenic Committee Coordinator* 

Green Massachusetts

Commonwealth of Massachusetts

Deval L. Patrick, Governor Timothy P. Murray, Lieutenant Governor

Richard K. Sullivan, Jr., Secretary, Executive Office of Energy and Environmental Affairs Mary B. Griffin, Commissioner, Department of Fish and Game

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